



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/914,209	01/15/2002	Osamu Takada	500.40548X00	1870

20457 7590 02/17/2005

ANTONELLI, TERRY, STOUT & KRAUS, LLP  
1300 NORTH SEVENTEENTH STREET  
SUITE 1800  
ARLINGTON, VA 22209-9889

EXAMINER

SUAZO, RAINIER A

ART UNIT PAPER NUMBER

2144

DATE MAILED: 02/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<p align="center"><b>Office Action Summary</b></p>	<b>Application No.</b> 09/914,209	<b>Applicant(s)</b> TAKADA ET AL.	
	<b>Examiner</b> Rainier Suazo	<b>Art Unit</b> 2144	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on 15 January 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>01/15/2002</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This application has been examined. Claims 1-6 presented for examination.

#### ***Objections***

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 5 recites the limitation "A network system as claimed in claim 5".

Such dependency is not particularly pointing out the subject matter of the claim.

As per MPEP 2143.03 (2<sup>nd</sup> paragraph), for the purpose of examination claim 5 was interpreted to be dependent on claim 4.

***Claim Rejections - 35 USC § 102(e)***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-2 are rejected under 35 U.S.C. 102(e) as being anticipated by

Picher-Dempsey (**U.S. 6,779,031 B1**), hereinafter 'Picher'.

5. Picher taught a system and for monitoring communication session. However the teachings regarding the environment in which the monitoring being performed is pertinent to the instant invention.

6. Regarding claim 1,

Picher taught a network system connected with a plurality of network domains, each of said domains configured of a communication node that enables to transfer an IP packet and process data, a network management system, a control server, and a plurality of end systems, characterized in that:

said end system located in any one of said network domains operates to transmit to said communication node a communication request in which the communication quality is guaranteed to another network domain (**from column 1 line 66 to column 2 line 1; and column 2 lines 63 –65**), said communication node having received said communication request operates to request a request

Art Unit: 2144

for setting a communication path between said network domains to said network management system (**column 2 lines 1-4 and 65-66**), said network management system operates to determine if a network resource exists in said another network domain corresponding to the request for setting the communication path (**column 2 lines 4-8**), if yes, arbitrate said local network with said another network domain, and set the communication path in which the communication quality is guaranteed over both of said network domains (**from column 2 line 66 to column 3 line 6**).

7. Regarding claim 2,

Picher taught a system wherein said network management system having received the communication request in which the communication quality is guaranteed to said another network domain by said communication node (**from column 1 line 66 to column 2 line 1 and column 2 lines 63 –65**) operates to determine if a network resource exists in said another network domain in response to said communication request (**column 2 lines 4-8**), based on the qualification information of a request source having issued said communication request and a network resource allocating policy (**column 4 lines 3-10 and 39-45**).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims **3-6** are rejected under 35 U.S.C. 103(a) as being unpatentable over Picher-Dempsey (**U.S. 6,779,031 B1**), hereinafter 'Picher' in view of Braden et al. (RFC 2205, IETF Network Working Group, September, 1997, "Resource ReSerVation Protocol (RSVP)") hereinafter 'Braden' and further in view of Willebeek-LeMair et al. (On Multipoint Control Units for Videoconferencing, IEEE, 1994) hereinafter 'Willebeek'.

9. Regarding claim **3**,

Picher taught a system including means for downloading control software required for processing data (**fig. 2 and column 4 lines 31-38**).

Picher taught the invention substantially as claimed, however Picher did not expressively teach details regarding that the system may provide a multi-point videoconference service on a communication path in which communication quality is guaranteed.

Picher motivates the combination of Picher with Braden. Picher motivates the exploration of the art of supporting sessions including RSVP multi-point sessions **(column 4 lines 5-10)**.

Braden motivates the combination of Picher combined with Braden, with the teachings of Willebeek. Braden further motivates the exploration of the art of providing RSVP reservation style appropriate for video signals **(page 12 paragraph 6)**.

Willebeek teaches the use of Multipoint Control Units (MCUs) for handling and forwarding data streams from one participant of a videoconference to another using methods to guarantee network performance **(Abstract and Introduction [page 356])**.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the methods/systems of Picher with the teachings of Braden; and further modify Picher combined with Braden with the teachings of Willebeek, in order to provide a multi-point videoconference service on a communication path in which communication quality is guaranteed.

The combination of Picher, Braden and Willebeek would have provided a system that provides RSVP supported sessions **(Picher, column 4 lines 5-10)**, further supporting reservations stiles appropriate for video signals **(Braden page 12)**; and further using the reserved path for transmitting multi-point videoconferencing data streams **(Willebeek, page 356 paragraphs 1, 7 and 8; and page 360 paragraphs 2-4)**. Therefore providing a system that transmits

Art Unit: 2144

multi-point videoconference service or data stream over a communication path that guarantees quality by reserving the required resources.

10. Regarding claim 4,

The combination of Picher with Braden and Willebeek taught the invention substantially as claimed.

Picher combined with Braden and Willebeek taught a network system wherein if the communication request from said communication node indicates reservation of a network resource between said network domains (**Picher: column 4 lines 5-10 and 39-52**), said network management system operates to break the network resource request received from said communication node into a set of network resource elements (**Picher: column 4 lines 39-52** [“...user information such as...to identify domain, router names, session definitions, etc...”]) (**Braden: pages 31-33 and 35-36**), convert said request into a set of request for reserving each network resource elements enter the reserving information of the corresponding network resource element for each converted reserving request (**Braden: pages 35-36**) and determine if said network resource element can be reserved on the basis of the qualification information of a request source having issued said reserving request and network resource allocating information (**Picher: fig. 2-3 column 2 lines 4-8 and column 4 lines 3-10 and 39-45**). See also pages 26-27 in Braden, in particular second paragraph on page 27 for information regarding RSVP requests elements and policy control mechanism (policy data and policy control).



**11. Regarding claim 5,**

Picher taught a system wherein the determination as to whether or not said reservation is enabled is carried out by determining if a requested bandwidth can be secured in a required timing as to one line leading from the requested communication node to the next communication node on the communication path **(from column 1 line 66 to column 2 line 8 and column 4 lines 5-10 and 39-65)**. Braden also taught reserving network resources, only if the requirement resources can be satisfied request **(pages 4-5, page 20 paragraph 4 and page 22 paragraph 1)**. Note that a starting and ending time are inherent in a session request.

**12. Regarding claim 6,**

Picher taught a system wherein, the request for reservedly setting a communication path in which the communication quality is guaranteed and the other request for promptly setting said communication path **(Braden: pages 4-5 and Picher: column 1 66 to column 2 line 8)**. Note that none of the references provide any teaching regarding delaying the reservation of the resources, implying that the determination of availability of resources is followed by the consequent reservation, which is done immediately. In deed reserving means keeping back or secure for oneself as for future use or special purpose, therefore it is more desirable to reserve the resources upon receiving the request, in order

Art Unit: 2144

to facilitate keeping the resources unavailable for future requests. Picher taught session definitions in **column 4 line 39**.

**13.** Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Picher-Dempsey (**U.S. 6,779,031 B1**), hereinafter 'Picher' in view of Keshav et al. (Issues and Trends in Router Design, IEEE, 1998) hereinafter 'Keshav' and further in view of Huard et al. (Programmable Transport Architecture with QoS Guarantees, IEEE, 1998) hereinafter 'Huard'.

**14.** Regarding claim 7,

Picher taught the invention substantially as claimed, however Picher did not expressively teach details regarding a communication nodes matching packet header patterns and processing data of the received packet.

Keshav teaches packet header pattern matching, since this technique is inherent in packet classification (**page 144 paragraph 5** ["...classify packets into predefined services classes ..."]).

Huard expressively teaches indicating data processing features in programmable transport architecture (**page 55 paragraph 4**).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the methods/systems of Picher with the teachings of Keshav and Huard, in order to provide packet matching for packet classification and data processing features in a communication node. Picher extensively motivated the exploration of the art of using QoS in communication

Art Unit: 2144

networks (see **fig. 2 [120] and column 1 lines 44-51**); which is taught too by Keshav and Huard. Keshav and Huard are part of the knowledge of one of ordinary skill in the art; see the background of the invention. The combination of Picher with Keshav and Huard would have added clarity to Picher's teachings in order to be expeditiously implemented; expressively including packet header pattern matching as inherently taught by Keshav (**page 144 paragraph 5 [“...classify packets into predefined services classes ...”]**) and also expressively indicating data processing features as taught by Huard (**page 55 paragraph 4**).

Art Unit: 2144

**Conclusion**

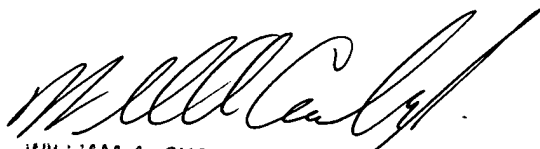
15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See attached PTO-892 for details.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rainier Suazo whose telephone number is (571) 272-3931. The examiner can normally be reached on Monday through Friday, 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Cuchlinski can be reached on (571) 272-3925. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Rainier Suazo, MBA  
Patent Examiner  
Art Unit 2144

  
WILLIAM A. CUCHLINSKI, JR.  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2400